

# COMMISSION OF THE EUROPEAN COMMUNITIES

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Brussels, 24 June 1991

Amended Proposal for a

## COUNCIL DECISION

adopting a specific research and technological development  
programme in the field of human capital and mobility  
(1990-1994)

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(presented by the Commission pursuant to Article 149(3)  
of the EEC Treaty)

### Explanatory Memorandum

On the 28 May 1990, the Commission presented the "Proposal for a Council Decision on a specific research and technological development programme in the field of Human Capital and Mobility".

Essentially, the amendments adopted by the European Parliament on the content of the Programme aim to bring its content closer to the priority accorded to the strengthening of the Community's Human Capital in the area of science and technology.

The Parliament also defined the indicative allocation of expenditure mentioning, where relevant, the percentage of the expenditure destined for the researchers themselves.

Finally, the Parliament took into account certain points resulting from the agreement reached between the Council, the Parliament and the Commission on 17 April last ("Trilogue").

In accordance with the "trilogue" of 17 April, the Commission withdrew amendments no. 3 (on condition that it is reformulated to conform precisely with the "trilogue" of 17 April 1991), 11, 14 (second part) and 16.

On the other hand, taking into account the agreement of 17 April 1991, the Commission was unable to accept amendments no. 1, 12, 13, 14 (first part), 15, 18 (paragraph on staff) or the paragraph on the dissemination of knowledge in amendment no. 19.

Concerning the specific amendments relating to the scientific and technical content of the Programme, the Commission accepted amendments no. 2, 4 to 10, 17 (provided that the paragraph on the eastern European countries and those on the form and nature of networks are reformulated), 18 (except that part which is of a horizontal nature, already quoted). On the other hand the Commission cannot give its approval to the part of amendment no. 19 which is concerned with the selection procedure for grant recipients, this being impracticable and difficult to manage.

In order to take into account the amendments of the European Parliament, the Commission is presenting a modified proposal to the Council based on Article 149, paragraph 3 of the E.E.C. Treaty which will include all of the elements of the agreement of the 17 April.

Modified proposal for a

COUNCIL DECISION

adopting a specific research and technological development  
programme in the field of Human Capital and Mobility  
(1990-1994)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,  
and in particular Article 130q(2) thereof,

Having regard to the proposal from the Commission,<sup>(1)</sup>

In cooperation with the European Parliament,<sup>(2)</sup>

Having regard to the opinion of the Economic and Social Committee,<sup>(3)</sup>

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(1) OJ No C

(2) OJ No C

(3) OJ No C 332, 31.12.90, p.45.

Whereas, by its Decision 90/221/Euratom, EEC<sup>(4)</sup>, the Council adopted a third framework programme for Community activities in the field of research and technological development (1990-94), specifying inter alia the activities to be pursued for the management of intellectual resources (human capital and mobility); whereas this Decision should be taken in the light of the grounds set out in the preamble to that Decision;

Whereas Article 130k of the Treaty stipulates that the framework programme is to be implemented through specific programmes developed within each activity;

Whereas the Joint Research Centre shall contribute through its own programme to the implementation of the aforesaid activities;

Whereas, pursuant to Article 4 and Annex I of Decision 90/221/Euratom, EEC, the amount deemed necessary for the whole framework programme includes an amount of 57 million ecus for the centralized dissemination and exploitation of results, to be divided up in proportion to the amount envisaged for each of the actions;

Whereas in the context of this programme an assessment should be made of the economic and social impact as well as any eventual technological risks;

Whereas the training of young European scientists is one of the priorities of the third Framework Programme as is the mobility of research staff and the creation of scientific and technological cooperation networks;

Whereas any action designed to exploit the potential of the Community's intellectual resources must essentially be of benefit to the scientists and researchers themselves;

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(4) OJ No L 117, 8.5.1990, P.28.

Whereas a further objective of this programme should be the creation of a "researchers' Europe", through the internationalization of their advanced training, enabling it to take place outside their Member State of origin;

Whereas a suitable application of the subsidiarity principle in this field implies the extending of training received by young researchers in their own country by enabling them, through traineeships made available by the Community to develop a research activity in a team or laboratory of excellence situated in another Member State;

Whereas in order to increase and improve the supply of host opportunities, it would appear useful also to provide for networks of associated teams or laboratories of excellence and for possibilities for access to major installations;

Whereas the JRC with its laboratories and installations can effectively be included among those organisations capable of playing an important role in the training of young researchers;

Whereas it is appropriate to adopt decentralised methods of selecting candidates thereby closely associating teams or laboratories of excellence with the implementation of this action;

Whereas the setting up of the network infrastructure is of crucial importance for the achievement of the objectives of the Community's R&TD policy, since it will consolidate and supplement the structuring effects of the thematic programmes;

Whereas the Scientific and Technical Research Committee (CREST) has been consulted,

HAS ADOPTED THIS DECISION:

Article 1

A specific research and technological development programme for the European Economic Community in the field of human capital and mobility, as defined in Annex I, is hereby adopted for a period commencing on ... (date of adoption by Council) and ending on 31 December 1994.

Article 2

1. The funds estimated as necessary for the execution of the programme amount to 488.07 million ecus. This includes funds for personnel and administration, of an amount of 15 million ecus.
2. An indicative allocation of funds is set out in Annex II.
3. If the Council takes a decision in application of Article 1(4) of Decision 90/221/Euratom, EEC, this decision shall be adapted to take into account the aforementioned decision.

Article 3

1. Rules for the implementation of the programme are set out in Annex III.
2. The rate of the Community financial contribution shall be laid down in accordance with Annex IV to Decision 90/221/Euratom, EEC.

Article 4

1. During the second year, the Commission shall review the programme and address a report to the Council and the European Parliament on the results of the review together with a proposal for any necessary changes.
2. At the end of the programme the Commission, by means of a group of independent experts, shall assess the results. The report of the group, together with the observations of the Commission, shall be presented to the Council and the European Parliament.
3. The reports mentioned in paragraphs 1 and 2 shall be drawn up having regard to the objectives set out in Annex I to this Decision and in accordance with Article 2(4) of Decision 90/221/Euratom, EEC.

Article 5

1. The Commission shall assure the implementation of the programme.
2. Contracts concluded by the Commission shall govern the rights and obligations of each party, in particular the arrangements for the dissemination, protection and exploitation of research results, in accordance with the provisions adopted pursuant to the second subparagraph of Article 130k of the Treaty.
3. A work programme shall be drawn up in accordance with the aims set out in Annex I and updated where necessary. It shall set out the detailed objectives and types of projects to be undertaken, and the financial arrangements to be made for them. The Commission shall make calls for proposals for projects on the basis of the work programme.

Article 6

The Commission shall be assisted by a Committee composed of representatives of the Member States and chaired by the representative of the Commission. The representative of the Commission shall submit to the Committee a draft of the measures to be taken. The Committee shall deliver its opinion within a time limit which the Chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority provided for in Article 148(2) of the Treaty as regards adoption of decisions which the Council is required to adopt on a proposal from the Commission. When the Committee votes, the votes of the representatives of the Member States shall be weighed as laid down in the abovementioned Article. The Chairman shall not vote.

The Commission shall adopt the proposed measures when they are in accordance with the Committee's opinion.

When the proposed measures are not in accordance with the Committee's opinion, or where no opinion is delivered, the Commission shall submit to the Council without delay a proposal concerning the measures to be taken. The Council shall act by a qualified majority.

If, on the expiry of a period of three months from referral of the matter to the Council, the latter has not acted, the proposed measures shall be adopted by the Commission.

Article 7

1. The procedure laid down in Article 6 shall apply:
  - to the preparation and updating of the work programme referred to in Article 5(3);
  - to the contents of the calls for proposals;
  - to the assessment of the projects provided for in Annex III and the estimated amount of the Community's contribution to them where this amount exceeds ECU 0.3 million;
  - to departures from the general rules set out in Annex III;
  - to the participation in any project by non-Community organizations and enterprises referred to in Article 8(1) and (2);
  - to any adaptation of the indicative allocation of the amount set out in Annex II;
  - to the measures to be undertaken to evaluate the programme;
  - to arrangements for the dissemination, protection and exploitation of the results of research carried out under the programme.
2. Where, pursuant to the third indent of paragraph 1, the amount of the Community contribution deemed necessary is less than or equal to ECU 0.3 million, the Commission shall inform the Committee of the projects and of the outcome of their assessment.

The Commission shall also inform the Committee of the implementation of the accompanying measures and concerted action referred to in Annex III.

3. The Commission may, and at the request of the representatives of four Member States, must consult the Committee on any matter falling within the scope of this Decision.

Article 8

1. The Commission is authorized to negotiate, in accordance with Article 130n of the Treaty, international agreements with third countries belonging to COST, in particular the member countries of EFTA and the countries of Central and Eastern Europe, with a view to associating them with all or part of the programme.

Organizations and enterprises established in third European countries may, on the principle of mutual benefit, be admitted to an action undertaken within the arrangements of this programme.

No contracting organization established outside the Community and participating in an action undertaken within the arrangements of the programme shall benefit from the financing granted to the programme by the Community. The organization in question shall contribute to the general administrative costs.

Article 9

This Decision is addressed to the Member States.

Done at ....., .....

For the Council,

The President

SCIENTIFIC AND TECHNICAL OBJECTIVES AND CONTENT

This specific programme fully reflects the approach embodied in the Third Framework Programme in terms of the scientific and technical goals and the underlying aims which it pursues.

Paragraph 6 of Annex II of the Framework Programme forms an integral part of the present specific programme.

#### 1. Objectives

The central objective of the programme is to help to increase the human resources available for research and technological development which will be needed by the Member States in the coming years, thus assisting the creation of a European scientific and technical Community.

Such action should generate added value for the Community which will benefit all the Member States.

As a contribution towards strengthening human resources in Central and Eastern European countries, the programme shall be open to participation by these countries. The expenditure arising from the participation of scientists from those countries in this programme shall be covered from the funds allocated for cooperation projects with the countries of Central and Eastern Europe.

The action should be organized in a transversal manner in accordance with 'bottom-up' management, focused on two main aims; the training and mobility of staff and the formation of networks.

In the pursuit of these objectives account will be taken of the experience acquired in the current SCIENCE, SPES and large-scale Scientific Facilities programmes. The activities carried out as part of these programmes will be redirected and developed in accordance with the spirit of this programme and taking into account its central objective.

The activities will therefore be adapted so that they may play a more important role in the training and specialization of young European scientists attached to university laboratories and public or private research institutes.

The present specific programme will be developed by means of the following activities:

- the development of a Community system of research fellowships
- the creation and development of scientific and technical cooperation networks

- measures to promote the access of researchers to large-scale scientific and technical facilities
- the launching of a Community system of 'R&D Euroconferences'.

The various activities will be carried out with a view to increasing the mobility of Community scientists, in particular young researchers at post-doctoral level. Scientists shall be considered as being at post-doctoral level if they have had at least six years' higher education and hold a doctorate or equivalent degree, or, if not, have had two years' research experience following a post-graduate course.

Young researchers at doctoral level may also benefit from the Community action carried out under this programme in the case of recently developed scientific disciplines in which there is a shortage of scientists at post-doctoral level.

Support under this programme may also be given to established researchers who need specific training in a field other than their own in the context of the retraining requirements demanded by the rapid pace of scientific and technological change, or in order to apply their scientific knowledge in new areas where their participation is required.

The building-up of the infrastructure of networks envisaged under this programme is of crucial importance for the achievement of the objectives of Community R&TD policy, since it will consolidate and add to the structuring effects of the thematic programmes.

Together, these networks must extend across all the regions of the Community countries, with particular reference to the special needs of the peripheral areas and the at present least-favoured regions. This will facilitate the establishment in those regions of a highly qualified scientific and technological potential. To this end, encouragement shall be given to the setting up in such regions of new research teams centred on young scientists trained abroad.

The Human Capital activities are to complement rather than replace the training carried out under the specific programmes and other Community training activities such as COMETT, EUROTECNET, etc.

Most of the financial resources available will be devoted to the development of human resources. In accordance with this aim the researchers themselves will be the main beneficiaries of Community aid. Specific aid shall be granted to facilitate the execution of R&D projects carried out by researchers receiving Community aid in the organisations receiving them, the training or scientific and technological cooperation networks or in a large-scale facility.

## II. Community activities and their funding

### 1. The development of a Community system of research fellowships:

R&TD teams, laboratories or centres of recognized quality for the training or specialization of researchers, may receive separately or jointly (in the case of a network), young scientists in accordance with the procedures described in Annex III.

To this end the Community shall grant financial aid to specific R&TD teams or laboratories or training networks consisting of a number of R&TD teams and laboratories covering a number of Community countries, to allow them to award research fellowships to researchers who are to undergo training or specialization there by participating in R&D work. In general these fellowships, to be known by the name of a man or a woman who have made an important contribution to the development of European Culture will be awarded in general for a period of two years for researchers at a doctoral or post-doctoral level.

In certain cases and with a view to ensuring a balanced geographical spread of human resources, the two-year fellowships may be extended for a further year in order to enable researchers from less-favoured regions to return to those regions and to consolidate the knowledge acquired.

The fellowships for established researchers shall last a number of months (less than one year).

The training of researchers shall consist in their participation in practical research projects carried out in teams or research laboratories.

In order to prevent a 'brain drain' from the disadvantaged regions of the Community and to increase the effectiveness of training, Community financial support may also be granted to an experienced researcher (whether a university researcher or not) to enable him to carry out R&D projects in a centre located in one of the said regions so as to train a number of young scientists locally.

This experienced researcher ("visiting professor" charged with the research) shall be from a Community country other than that of the region concerned.

The purpose of this Community system of research fellowships is to complete and enhance the training activities carried out under other specific programmes, thus laying the foundation of the European scientific and technical community.

The purpose of the grant is to enable the researcher concerned to cover subsistence and mobility related expenses. Special expenditure incurred by the researcher concerned in the course of publishing the findings of the research may be reimbursed. The grant also includes a contribution to the research expenses in the receiving laboratory and the expenses incurred by the laboratory in administering the grant. If the researcher receiving the grant is a scientist from an industrial firm seconded to a public research laboratory in another Community country, the amount of the grant shall be limited to covering the incidental expenses arising from his secondment and a contribution to research expenditure in the host laboratory.

2. Assistance for the creation and development of scientific and technical cooperation networks

The scientific and technical cooperation networks shall consist in general of at least five research laboratories or teams in at least three Community countries working jointly on one or more R&D projects.

The networks shall consist of either public or private research laboratories and teams in the Member States, to enable the best of them to exert as much influence as possible for the benefit of all the others. In particular, they shall encourage the interaction of different disciplines, the combining of various technologies and the application of techniques from one field in other fields.

If the innovative or complex nature of a scientific area so requires, encouragement shall be given to the setting-up of new networks consisting of research teams or laboratories with additional capacity.

In order to assist the consolidation and development of scientific and technical cooperation networks, Community funding shall cover expenses incurred in engaging researchers outside the network needed to complete the research project, incidental costs resulting from international cooperation (travel, accommodation and joint meetings), a contribution to research expenditure (experimental products, special purchases and the use of large-scale facilities if required) and administrative costs.

If a researcher trained under this programme sets up a new research team in a disadvantaged region of the Community, Community aid may include funds to equip the team if it joins a scientific and technical cooperation network supported by the Community.

This specific programme will pursue and further develop the activities already being carried out under the SCIENCE and SPES programmes, including them into a broader activity and giving them a new direction in order to take into account the principal objective of this specific programme. The follow up of SPES action will be expanded to include the human and social sciences.

### 3. Establishment of access to large scale scientific and technical facilities

The purpose of this activity is to promote access for Community researchers to large-scale scientific and/or technical facilities of great importance already existing in the Community. In particular, it will be geared to increasing the training opportunities offered to European researchers by enabling them to become familiar with the use of such facilities in the execution of research projects.

A 'large scale facility' is understood as being an establishment which requires substantial initial investment or a group of smaller establishments which have complementary capacities.

The Community financial aid granted to selected facilities will be designed to cover the costs arising from giving new scientists access to them (travel, subsistence expenses and user fees).

The aid will not be granted to purchase durable equipment or construct infrastructure.

### 4. Euroconferences

The aim of this activity is to enable young scientists to take part in especially important high-level conferences - meetings of scientists on subjects at the cutting edge of scientific or technical knowledge, at which specialists present and discuss their work and ideas.

Participation in such conferences will enable promising young scientists to keep up to date with the advance of knowledge in a particular field.

The Community's financial support will cover the participation expenses (registration, travel and subsistence) of young scientists attending the conferences, with priority being given to those from less-favoured regions.

## III. Scientific and technological sectors

By virtue of its horizontal nature, the present programme will cover all scientific and technological sectors. Thus it may in particular deal with strategic projects and projects drawn up in connection with the research sectors referred to in the first five activities mentioned in Article 1 of the third Framework Programme which are specified in Annex II thereto.

Nevertheless, the training measures carried out under this programme shall not be directly determined by the objectives of other specific programmes. This means that, in the sectors covered by the other specific programmes, measures may be carried out under this programme, but such measures must be in addition to the specific training carried out under the specific programmes themselves and any duplication of effort must be avoided.

In accordance with the open nature of the programme, the subjects to be included in basic research in the exact and natural sciences, including mathematics, will not be defined 'a priori'.

With regard to the social and human sciences, the programme shall essentially deal with training in projects likely to improve or enhance European competitiveness and bring about sustainable economic development, in fields such as the economic and management sciences, including environmental economics, as well as the interfaces between science, technology and society. Attention shall also be given to problems connected with the general public's understanding and acceptance of science and technology.

## ANNEX II

Indicative allocation of expenditure, specifying, where relevant, the percentage to be allocated to expenditure related to the researchers themselves.

	% of total	expenditure related to the researchers
1. Training	58	90%
2. Networks	30	
2.1 Development of networks	24	75%
2.2 Teams of young researchers	6	--
3. Access for researchers to large-scale facilities	10	
4. Euroconferences	2	

Note: Personnel expenses come to 9.5 million Ecus and the expenses of administration to 5.5 million Ecus. An additional sum of 25 million Ecus will be destined for JRC activities in the field of human capital and mobility, including a sum of 0.25 million Ecus representing the contribution of the JRC to centralised action for dissemination under this specific programme. A sum of 4.93 million Ecus, not included in the 488.07 million Ecus for the programme, will be reserved as a specific contribution to the Human Capital and Mobility programme, for centralised action for the dissemination and valorisation of the results.

ANNEX III

RULES FOR IMPLEMENTING THE PROGRAMME

1. The Commission shall implement the programme on the basis of the content described in Annex I.
2. The rules for implementing the programme, referred to in Article 3, comprise training actions and accompanying measures.

I. DEVELOPMENT OF A COMMUNITY SYSTEM OF RESEARCH FELLOWSHIPS

Participants in this action will comprise two categories:

- (i) Individual recipients of training fellowships;
- (ii) laboratories or research teams receiving fellowship recipients.

The individual fellowship recipients defined in (i) must be natural persons established in the Community. The laboratories or research teams defined in (ii) must be themselves based within the framework of legal entities established in the Community<sup>(1)</sup>, such as research centres, academic institutions, scientific foundations having their own research activities or industrial firms.

The participants in the training actions shall be chosen on the basis of a annual procedure aimed at matching host organisations with applicant researchers.

The procedure shall comprise two successive calls for proposals which will be published in the Official Journal of the European Communities.

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(1) For the purposes of this programme, the European Organization for Nuclear Research (CERN), based in Geneva but with the major part of its installations on Community territory, may be a participant in the contracts.

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The first call for proposals shall be made in accordance with the work programme cited in Article 5 paragraph 3. It shall outline the scientific domains considered as having priority. It shall refer to three categories of organisations which may receive fellowship recipients:

- (I) Individual research teams or laboratories;
- (II) research teams or laboratories as outlined in (I) grouped to form Intra-European networks linked for the purposes of a scientific and technical theme or a scientific and technical project; such a network shall in general involve at least five teams or research laboratories in at least three Member States of the Community;
- (III) Institutions offering large-scale, unique research facilities.

The proposals received from organisations which may receive fellowship recipients shall be selected by the Commission in respect of the arrangements of Articles 6 and 7 and published in the Official Journal of the European Communities.

The second call for proposals shall be primarily addressed to young researchers at a post-doctoral level to fill positions made available following the first call outlined above.

Criteria for the selection of proposals shall include: the curriculum vitae of the researcher candidate; the scientific or technological quality of the intended project with respect to the EC research policy; the impact on cohesion and the suitability and quality of the hosting research team. The selection shall be decentralized and carried out by the teams or laboratories concerned. The Commission shall monitor the Community selection criteria in particular as regards Community cohesion.

The terms given to the recipients of Community training fellowships shall be equal for all (allowances, mobility expenses, social insurance), irrespective of the category of host organisation, and taking into account the cost of living in the host countries.

## II. SCIENTIFIC AND TECHNICAL COOPERATION NETWORKS

The participants in scientific and technical development actions are networks of research laboratories undertaking joint research and development work. The number of Member States taking part in each network should be as high as possible. In no case shall a network have fewer than five public or private laboratories from a minimum of three Member States. The association of recognized high-quality laboratories and promising laboratories situated in the less-favoured regions of the Community shall be particularly sought. It will allow researchers working in isolation in an advanced area to unite their efforts.

The selection of proposals shall be made by the Commission in respect of the arrangements of Articles 6 and 7 from a call for proposals which shall be open continuously.

### III. ACCESS TO LARGE-SCALE FACILITIES

The participants in the actions planned to favour access for researchers to large-scale facilities in the Community are those organizations having such facilities at their disposal or a group of smaller facilities which together have the capacity of a large-scale facility.

The beneficiaries of Community support shall be of two types:

- scientists wishing to have access to the facilities for whom travel, subsistence and cost of using the equipment will be covered.
- organisations having such facilities at their disposal.

The selection procedure for choosing beneficiary organizations shall comprise two successive calls for proposals which shall be published in the Official Journal of the European Communities.

The first call for proposals shall be addressed to centres having large-scale scientific and technical facilities at their disposal. The proposals received in response shall be accompanied by expression of interest from potential users.

The selection of proposals shall be made by the Commission in respect of the arrangements of Articles 6 and 7.

The second call for proposals shall be published with the list of organizations pre-selected according to the previous procedure; it will aim to obtain joint equipment-user proposals.

The final selection shall be made by the Commission in respect of the arrangements of Articles 6 and 7.

The extent of Community support shall be based on the quality and unique features of the facility; interest shown by potential users; cost/benefit ratio of Community support; value for the Community in terms of importance of the facility in respect of the Community's overall scientific and technical potential.

### IV. EUROCONFERENCES

The participants in the action for the development of Euroconferences shall be organizations, scientific associations or learned societies organizing a series of high-level meetings for debating the latest work undertaken in advanced scientific or technical areas. Specific training of promising young researchers allowing them to become familiar with the latest developments in the sector shall also be carried out.

The procedure shall comprise a call for proposals defining the priority scientific areas selected for the work programme as cited in Article 5 paragraph 3.

The selection of proposals shall be made by the Commission in respect of the arrangements of Articles 6 and 7.

#### V. DISSEMINATION OF THE RESULTS

The dissemination of the results of the training actions shall be carried out within the specific programme as well as through the centralised action of dissemination and exploitation, pursuant to the Decision referred to in Article 4, third paragraph of Decision 90/221/Euratom, EEC.



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